

Curriculum Vitae

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Education

- Ph.D., Electrical Power Engineering, Ferdowsi University of Mashhad, Mashhad, Iran, 2015.
- M.Sc., Electrical Power Engineering, Ferdowsi University of Mashhad, Mashhad, Iran, 2010.
- B.Sc., Electrical Power Engineering, Zanjan University, Zanjan, Iran, 2006.

Research Interests

- Power System Protection
- Relay coordination
- Power System Transient Analysis
- Power System Reliability
- Renewable Energy

Publications

• Journal Papers

- [1] Mohammad Zaher Ghorbani-Juybari, Hossein Gholizade-Narm, and **Yaser Damchi**, “Optimal Recloser Placement in Distribution System Considering Maneuver Points, Practical Limitations, and Recloser Malfunction”, *International Transactions on Electrical Energy Systems*, pp. 1-12, April 2022.
- [2] Mohammad Hossein Sadeghi, Ali Dastfan, and **Yaser Damchi**, “Optimal Distributed Generation Penetration Considering Relay Coordination and Power Quality Requirements”, *IET Generation, Transmission and Distribution*, pp. 1-12, March 2022.
- [3] Seyed Masood Lal Moosavi, **Yaser Damchi**, and Mohsen Asili, “A New Fast Method for Improvement of Power Transformer Differential Protection Based on Discrete Energy Separation Algorithm”, *International Journal of Electrical Power & Energy Systems*, vol. 136, pp. 107759, March 2022.
- [4] Omid Haghgo, and **Yaser Damchi**, “Reliability Modelling of Capacitor Voltage Transformer Using Proposed Markov Model”, *Electric Power Systems Research*, vol. 202, pp. 107573, January 2022.
- [5] Mohammad Hossein Sadeghi, Ali Dastfan, and **Yaser Damchi**, “Robust and adaptive Coordination Approaches for Co-Optimization of Voltage Dip and Directional Overcurrent Relays Coordination”, *International Journal of Electrical Power & Energy Systems*, vol. 129, pp. 106850, July 2021.

- [6] Armin Mirsamadi, **Yaser Damchi**, and Mohsen Assili, “Impact of Human Error Modeling on Failure Rate and Optimum Routine Test Interval of Protection System”, *Iranian Journal of Electrical and Electronic Engineering*, vol. 17, no. 1, pp. 1–9, March 2021.
- [7] Mohammad Hossein Sadeghi, Ali Dastfan, and **Yaser Damchi**, “Optimal Coordination of Directional Overcurrent Relays in Distribution Systems with DGs and FCLs Considering Voltage Sag Energy Index”, *Electric Power Systems Research*, vol. 191, pp. 106884, February 2021.
- [8] **Yaser Damchi**, and Mohammad Dolatabadi, “Hybrid VNS-LP Algorithm for Online Optimal Coordination of Directional Overcurrent Relays”, *IET Generation, Transmission and Distribution*, vol. 14, no. 23, pp. 5447–5455, December 2020.
- [9] Reyhaneh Taheri, Mahdiyeh Eslami, and **Yaser Damchi**, “Single-end current-based algorithm for fault location in series capacitor compensated transmission lines”, *International Journal of Electrical Power & Energy Systems*, vol. 123, pp. 106254, December 2020.
- [10] **Yaser Damchi**, “Improvement of Robust Coordination of Distance and Overcurrent Relays by Selecting Appropriate Performance Characteristics of Overcurrent Relays using Hybrid Algorithm of Genetic and Linear Programming”, *Computational Intelligence in Electrical Engineering*, vol. 11, no. 1, pp. 1–10, April 2020.
- [11] Hossein Gholizade-Narm, **Yaser Damchi**, Mohammad Zaher Ghorbani-Juybari, “Optimal Switch Placement in Real Distribution Network considering Cut-out Fuses, the Importance of Feeders and Ring Points in the Presence of Distributed Generation using Improved Bee Algorithm (Case Study: Mazandaran Distribution Network)”, *Computational Intelligence in Electrical Engineering*, vol. 10, no. 4, pp. 15 – 26, January 2020.
- [12] Mohammad Dolatabadi, and **Yaser Damchi**, “Graph Theory Based Heuristic Approach for Minimum Break Point Set Determination in Large Scale Power Systems”, *IEEE Transactions on Power Delivery*, vol. 34, no. 3, pp. 963 – 970, June 2019.
- [13] Mohammad Hossein Sadeghi, **Yaser Damchi**, and Hosseinali Shirani, “Improvement of Operation of Power Transformer Protection System During Sympathetic Inrush Current Phenomena Using Fault Current Limiter”, *IET Generation, Transmission and Distribution*, vol. 12, no. 22, pp. 5968 – 5974, December 2018.
- [14] **Yaser Damchi**, Mohammad Dolatabadi, Habib Rajabi Mashhad, and Javad Sadeh, “MILP Approach for Optimal Coordination of Directional Overcurrent Relays in Interconnected Power Systems”, *Electric Power Systems Research*, vol. 158, pp. 267 – 274, May 2018.
- [15] **Yaser Damchi**, Javad Sadeh, and Habib Rajabi Mashhad, “Applying Hybrid Interval Linear Programming and Genetic Algorithm to Coordinate Distance and Directional Overcurrent Relays”, *Electric Power Components and Systems*, vol. 44, no. 17, pp. 1935 – 1946, January 2016.
- [16] **Yaser Damchi**, Javad Sadeh, and Habib Rajabi Mashhad, “Optimal Coordination of Distance and Overcurrent Relays Considering a Non-Standard Tripping Characteristic for Distance Relays”, *IET Generation, Transmission and Distribution*, vol. 10, no. 6, pp. 1448 – 1457, January 2016.
- [17] **Yaser Damchi**, Javad Sadeh, and Habib Rajabi Mashhad, “Preprocessing of Distance and Directional Overcurrent Relays Coordination Problem Considering Changes in Network Topology”, *International Transactions on Electrical Energy Systems*, vol. 26, no. 1, pp. 32 – 48, January 2016.
- [18] **Yaser Damchi**, Javad Sadeh, and Habib Rajabi Mashhad, “Optimal Coordination of Distance and Directional Overcurrent Relays Considering Different Network Topologies”, *Iranian Journal of Electrical and Electronic Engineering*, vol. 11, no. 3, pp. 231 – 240, September 2015.
- [19] **Yaser Damchi**, Javad Sadeh, and Habib Rajabi Mashhad, “Considering Pilot Protection in Optimal Coordination of Distance and Directional Overcurrent Relays”, *Iranian Journal of Electrical and Electronic Engineering*, vol. 11, no. 2, pp. 154 – 164, June 2015.

- [20] Morteza Abbasghorbani, Habib Rajabi Mashhad, and **Yaser Damchi**, “[Reliability-Centered Maintenance for Circuit Breakers in Transmission Networks](#)”, *IET Generation, Transmission and Distribution*, vol. 8, no. 9, pp. 1583 – 1590, September 2014.
- [21] **Yaser Damchi**, and Javad Sadeh, “[Effect of Remote Back-up Protection System Failure on the Optimum Routine Test Intervals in Power Protection System](#)”, *Iranian Journal of Electrical and Electronic Engineering*, vol. 9, no. 4, pp. 237 – 245, December 2013.
- [22] **Yaser Damchi**, and Javad Sadeh, “[Determination of the Optimum Routine and Self-checking Test Time Intervals for Power System Protection Considering Back-up Protection System Failure](#)”, *IET Generation, Transmission and Distribution*, vol. 7, no. 10, pp. 1163 – 1171, October 2013.

• Selected Conference Papers

- [1] Maryam Niknezhad, Javad Sadeh, and **Yaser Damchi**, “[Effects of Fixed Speed Wind Farm on Power Swing Detection in Distance Relays](#)”, *International Power System Conference*, Tehran, Iran, pp. 1 – 7, October 2016.
- [2] Mohammad Mehdi Kamali-faz, Javad Sadeh, and **Yaser Damchi**, “[Differential Equation Based Fault Location Method for HVDC Transmission Line](#)”, *Power Systems Protection and Control Conference*, Tehran, Iran, pp. 1 – 4, January 2014.
- [3] **Yaser Damchi**, Habib Rajabi Mashhad, Javad Sadeh, and Mohsen Bashir, “[Optimal Coordination of Directional Over-current Relays Using a Hybrid Particle Swarm Optimization for Micro-grid System](#)”, *IEEE International Conference on Advanced Power System Automation and Protection*, Beijing, China, Vol. 2, pp. 1135 – 1138, October 2011.
- [4] **Yaser Damchi**, and Javad Sadeh, “[Effect of Monitoring and Self-Checking Tests Effectiveness Index of Back-Up Protection System on the Optimum Routine and Self-Checking Tests Interval of Protection System](#)”, *IEEE International Conference on Advanced Power System Automation and Protection*, Beijing, China, pp. 1367 – 1372, October 2011.
- [5] **Yaser Damchi**, and Javad Sadeh, “[Effect of Monitoring and Self-Checking Tests Effectiveness Index of Back-Up Protection System on the Optimum Routine and Self-Checking Tests Interval of Protection System](#)”, *IEEE International Conference on Advanced Power System Automation and Protection*, Beijing, China, pp. 1367 – 1372, October 2011.
- [6] Javad Sadeh, and **Yaser Damchi**, “[Reliability and Sensitivity Analysis of Motor Protection System Using Fault Tree Method](#)”, *IEEE/PES Transmission and Distribution Latin America Conference and Exposition*, Sao Paulo, Brazil, pp. 226 – 230, November 2010.
- [7] Javad Sadeh, and **Yaser Damchi**, “[Maximum lightning overvoltage location and reliability indices in power system with combined transmission](#)”, *IEEE/PES Transmission and Distribution Latin America Conference and Exposition*, Sao Paulo, Brazil, pp. 212 – 217, November 2010.
- [8] **Yaser Damchi**, and Javad Sadeh, “[Effect of Combined Transmission Line \(Overhead Line/Cable\) on Power System Reliability](#)”, *IEEE International Conference on Power Engineering and Optimization*, Shah Alam, Malaysia, pp. 59 – 63, Jun 2010.
- [9] **Yaser Damchi**, and Javad Sadeh, “[Considering Failure Probability for Back-up Relay in Determination of the Optimum Routine Test Interval in Protective System Using Markov Model](#)”, *IEEE Power Engineering Society General Meeting*, Calgary, Alberta, Canada, pp. 1 – 5, July 2009.

Collaborating in Industrial Projects

- [1] Investigation of the Industrial Loads (such as Urban Railway) Effect on the Low Impedance Restricted Earth Fault Protection, 2021, (as Project Manager).
- [2] Study on the Application of the Risk Matrix due to Resource Constraints and Unlimited Expectations, 2020, (as Research Team).

- [3] Study of Switches in Distribution Network and Determine the Optimal Maneuver Points (by Controllable Switching Devices) the Problem of Distribution Switches Placement in the Presence of Distributed Generation Sources for Increasing the Reliability, 2019, (as Research Team).
- [4] Investigating and Analyzing of the Effective Parameters on the Restricted Earth Fault Protection, 2017, (as Research Team).
- [5] Study of High Impedance and Low Impedance Restricted Earth Fault Transformer and Busbar Protection and Determination of Requirements, 2015, (as Research Team).
- [6] Investigating, Analyzing and Optimization of Preventive Maintenance Scheduling in Transmission Network of Khorasan Regional Electric Company (KREC) Network, 2015, (as Research Team).
- [7] Needs Assessment and Feasibility Study of using Over-Fluxing Relay in Mashhad Power Plant Units, 2011, (as Research Team).
- [8] Calculation and Comparison of Allowable Current of High Voltage Cables in Different Installation Conditions, 2010, (as Research Team).
- [9] Investigating the Short Circuit Effects of 400 kV Toos- Neyshabur Line on the Busbar of Neyshabur Power Plant and Neyshabur Steel Factory and Providing a Solution to Prevent Similar Events, 2009, (as Research Team).

Professional Experiences

- [1] Setting up a Protection and Relays Digital Laboratory in Shahrood University of Technology, Iran, 2017.
- [2] Head of Power Department at Electrical Engineering Faculty, Shahrood University of Technology, Iran, 2020-now.

Professional Services

- Reviewer of IEEE Transactions on Power Delivery.
- Reviewer of IET Generation, Transmission & Distribution.
- Reviewer of IET Renewable Power Generation.
- Reviewer of Electric Power Systems Research.
- Reviewer of Electric Power Components and Systems.
- Reviewer of IEEE Power and Energy Technology Systems Journal.
- Reviewer of International Journal of Industrial Electronics, Control and Optimization.
- Reviewer of Computational Intelligence in Electrical Engineering.
- Reviewer of Journal of Intelligent Procedures in Electrical Technology.
- Reviewer of Iranian Journal of Electrical and Electronic Engineering.
- Reviewer of Iranian Electric Industry Journal of Quality and Productivity.
- Reviewer of Iranian Journal of Electrical and Computer Engineering.
- Reviewer of Tabriz Journal of Electrical Engineering.
- Reviewer of Energy Engineering & Management.